

**WHAT IS CLAIMED IS:**

1. A fan assembly for a refrigerator, comprising:  
a fan motor;  
5 a blow fan driven by the fan motor for producing a cold air flow in a direction opposite to a gravitational direction;  
a fan guide for horizontally partitioning a heat exchange chamber, the fan motor and the blow fan being installed on the fan guide, the cold air flow passing through the fan guide;  
10 a mounting leg formed on one side of the fan guide and coupled to a rear wall of the heat exchange chamber with a fastening screw; and  
a fixing hook formed on the fan guide at a side opposite to the mounting leg and hooked into a ceiling of the heat exchange chamber.
- 15 2. The fan assembly as claimed in claim 1, wherein the fan guide includes:  
a horizontal base having a through-hole formed therein, the air flow passing through the through-hole; and  
a pair of vertical walls protruding , respectively, from both ends of the horizontal base, the fixing hook being provided on an upper end of the vertical wall.
- 20 3. The fan assembly as claimed in claim 2, wherein a plurality of link legs are formed around portions of the horizontal base adjoining the through-hole, and a motor support with the motor seated thereon is provided on tip ends of the link legs.
- 25 4. The fan assembly as claimed in claim 3, wherein one of the link legs positioned at a side opposite to a mounting direction of the mounting leg is further provided with a fastening rib coupled to a grille pan for partitioning the heat exchange chamber.
- 30 5. The fan assembly as claimed in claim 1, wherein the mounting leg is provided with shield walls extending in a longitudinal direction at both ends thereof.

6. The fan assembly as claimed in claim 1, wherein the fan guide is integrally formed with at least one wire hanger onto which a lead wire is hung.

- 5 7. The fan assembly as claimed in claim 6, wherein the wire hanger includes:  
a hanger portion with one end thereof connected to the fan guide, the lead wire being securely positioned into the hanger portion; and  
a guide portion for guiding the lead wire into the hanger portion, the guide portion being further spaced apart from a surface of the fan guide as it goes toward the tip.

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8. A fan assembly for a refrigerator including a refrigerating chamber formed at a relatively lower portion of a main body of the refrigerator, a freezing chamber formed at a relatively upper portion of the main body and a heat exchange chamber partitioned behind at least the freezing chamber for producing cold air, comprising:

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a fan motor;

a blow fan driven by the fan motor for producing a cold air flow supplied to the refrigerating and freezing chambers;

a fan guide with the cold air flow passing therethrough, the fan motor and the blow fan being installed on the fan guide;

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at least two mounting leg formed on one side of the fan guide and coupled to a rear wall of the heat exchange chamber with fastening screws;

a fixing hook formed on the fan guide at a side opposite to the mounting leg and hooked into a ceiling of the heat exchange chamber; and

at least one wire hanger provided on the fan guide,

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wherein a lead wire through which electrical signals for driving the fan motor are transferred is hung and supported on the wire hanger.

9. A fan assembly as claimed in claim 8, wherein the fan guide includes:

- 30 a horizontal base having a through-hole formed therein, the mounting legs and the wire hanger being formed on the horizontal base; and

a pair of vertical walls protruding, respectively, from both ends of the horizontal base in a direction opposite to the mounting legs, the fixing hook being provided on an upper end of the vertical wall.

5 10. The fan assembly as claimed in claim 9, wherein a plurality of link legs are formed around portions of the horizontal base adjoining the through-hole, and a motor support on which the motor is seated is provided on tip ends of the link legs.

10 11. The fan assembly as claimed in claim 10, wherein one of the link legs positioned at a side opposite to a mounting direction of the mounting leg is further provided with a fastening rib coupled to a grille pan for partitioning the heat exchange chamber.

12. The fan assembly as claimed in claim 8, wherein the wire hanger includes:  
a hanger portion, one end of the hanger portion being connected to the fan guide,  
15 the lead wire being securely positioned into the hanger portion; and  
a guide portion for guiding the lead wire into the hanger portion, the guide portion being further spaced apart from a surface of the fan guide as it goes toward the tip.

13. A fan assembly for a refrigerator, comprising:  
20 a fan motor;  
a blow fan driven by the fan motor for producing a cold air flow which is supplied to the refrigerating and freezing chambers formed in a main body of the refrigerator;  
a fan guide with the cold air flow passing therethrough, the fan motor and the blow fan being installed on the fan guide; and  
25 at least one wire hanger provided on the fan guide,  
wherein a lead wire through which electrical signals for driving the fan motor are transferred is hung and supported on the wire hanger.

14. The fan assembly as claimed in claim 13, wherein the fan guide includes:  
30 a horizontal base horizontally formed in a heat exchange chamber, the air flow

passing through the horizontal base, the horizontal base being formed with at least two mounting legs coupled to the heat exchange chamber at one side thereof; and

5 a pair of vertical walls protruding from both ends of the horizontal base in a direction opposite to the mounting legs, wherein a fixing hook hung into a ceiling of the heat exchange chamber is formed on a tip end of the vertical wall at a side of the horizontal base opposite to where the mounting legs are provided.

15. The fan assembly as claimed in claim 14, wherein a through-hole with the cold air flow passing therethrough is formed in the horizontal base, a plurality of link legs are  
10 formed around portions of the horizontal base adjoining the through-hole, and a motor support on which the motor is seated is provided on tip ends of the link legs.

16. The fan assembly as claimed in claim 15, wherein one of the link legs positioned at a side opposite to a mounting direction of the mounting leg is further provided with a  
15 fastening rib coupled to a grille pan for partitioning the heat exchange chamber.

17. The fan assembly as claimed in claim 13, wherein the wire hanger includes:  
a hanger portion, one end of the hanger portion being connected to the fan guide, the lead wire being securely positioned into the hanger portion; and  
20 a guide portion for guiding the lead wire into the hanger portion, the guide portion being further spaced apart from a surface of the fan guide as it goes toward the tip.